

### **REMARKS**

The Application has been carefully reviewed in light of the Office Action dated July 21, 2008. In this response, claims 1, 12, 16-18 are amended; claims 5, 13, and 19 are canceled without prejudice or disclaimer. Accordingly, claims 1, 12, and 16-18 are pending. Further examination is respectfully requested.

#### **Rejections under 35 USC §103(a)**

Claims 1, 5, 12, 13, 17, and 19 are rejected under 35 U.S.C. §103(a) over US Patent No. 2001/0052928 (Imagawa), in view of US Patent No. 6, 460,127 (Akerib). Claim 16 is rejected under 35 U.S.C. §103(a) over Matsuura, Akerib, and Funayama, and further in view of US Patent No. 5,953,134 (Sato). Claim 17 is rejected under 35 U.S.C. § 103(a) over Matsuura, Akerib, and Funayama, and further in view of US Patent No. 5,760,831 (Tanaka). Applicants respectfully traverse the above-noted rejections.

In rejections of claims 16 and 17, reference Imagawa is believed to be incorrectly stated as Funayama. Applicants proceed in this response presuming that the Funayama reference is Imagawa.

In lieu of the present Amendment, the rejections of claims 5, 13, and 19 are now moot. As such, withdrawal of the rejections of claims 5, 13, and 19 is respectfully requested.

Amended independent claim 1 recites, *inter alia*, "...histogram generating means for generating a first histogram of the entire input image and a second histogram of the detected face region, calculating means for calculating a highlight point and a shadow point of the input image from the first histogram of the entire input image, first generating means for generating a gradation correction based on the highlight point, the shadow point, a target highlight point and a target shadow point; conversion means for converting the second histogram based on the highlight point and the shadow point, determining means for determining a representative luminance of the detected face region based on the converted second histogram of the detected face region; second generating means for generating an exposure correction based on the representative luminance, and

correcting means for correcting the input image based on the gradation correction and the exposure correction".

The applied arts are not seen to teach the foregoing features of claim 1, in particular, the gradation correction is based on the highlight point, the shadow point, a target highlight point and a target shadow point of the first histogram (entire image), whereas the exposure correction is based on the representative luminance of the second histogram (face region). The first and second histogram is disclosed, for example, in steps S83 to S85 of Fig. 15. By virtue of the foregoing features of claim 1, the first and second histograms only need to be generated once by the histogram generation means.

The Office Action conceded, and Applicants agree, that Matsuura does not explicitly teach "detecting means for detecting a face region in the image, and determining representative luminance..." and "second generation means for generating an exposure correction based on the representative luminance..." (pg. 7, lines 1-7, Office Action) The Office Action turns to the other applied art, Imagawa, for teaching the above-noted elements of claim 1.

While Imagawa may teach detecting a face region and calculating a histogram for each normalized angle inside the face region candidate image ([0261], Imagawa), Imagawa does not teach "conversion means for converting the second histogram (the face region) based on the highlight point and the shadow point". The above conversion means feature of claim 1 is disclosed, for example, in step S97 of Fig. 19 of the present specification. As recited in claim 1, the highlight point and shadow point are calculated from the first histogram of the entire image. There is no teaching or suggestion in Imagawa that a histogram of a face region is converted based on a highlight point and shadow point of the entire image.

Consequently, Imagawa fails to disclose or suggest the converted second histogram. Thus, the representative luminance of the present invention, which is determined based on the converted second histogram, would also be different from the luminance information of Imagawa.

The other applied art, namely Akerib, is not seen to remedy the foregoing deficiencies of Matsuura and Imagawa. While Akerib may teach generating exposure correction, there is no teaching or suggestion in Akerib that the exposure correction is

generated based on the representative luminance, which is determined based on the converted second histogram.

Assuming *arguendo* that the combination of the applied arts is permissible, the applied arts, either taken alone or in combination, still fail to disclose or suggest the foregoing features of claim 1. Therefore, claim 1 is believed to be in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience. In addition, amended independent claims 12 and 18 contain substantially similar features as that of claim 1, and were rejected based on the same reasons. Therefore, claims 12 and 18 are also believed to be in condition for allowance for at least the same reasons as discussed above with respect to claim 1.

The other pending claims remaining under consideration in this application are each dependent from the independent claims discussed above and are therefore believed to be in condition for allowance for at least the same reasons. Because each dependent claim is also deemed to define an additional aspect of the invention, however, individual consideration of each on its own merits is respectfully requested.

### **CONCLUSION**

Applicants respectfully submit that all of the claims pending in the application meet the requirements for patentability and respectfully request that the Examiner indicate the allowance of such claims.

Any amendments to the claims which have been made in this response which have not been specifically noted to overcome a rejection based upon prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

If any additional fee is required, please charge Deposit Account Number 502456.

Should the Examiner have any questions, the Examiner may contact Applicants' representative at the telephone number below.

Respectfully submitted,

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Date

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